AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

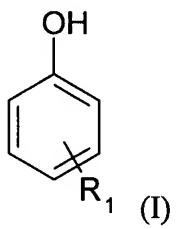
1-30 (Canceled)

31. (New) (New) The beads of a phenolic compound having a high hot solubility of at least 500 g/l at a reference temperature of 90°C, and a large difference of solubility between its hot solubility and cold solubility, i.e. between a first operational temperature being the temperature in a fragmentation apparatus and a second operational temperature the being the temperature of a cooling gas stream, said beads being both attrition resistant and porous.

32. (New) The beads according to claim 31, wherein the phenolic compound has a high hot solubility of at least 1000 g/l at a reference temperature of 90°C and the difference of solubility being at least doubled between the two operational temperatures.

33. (New) The beads according to claim 32, wherein the difference of solubility is a multiple of at least 3 to 5 times between said two operational temperatures.

34. (New) The beads according to claim 31, wherein the phenolic compound has the following formula (I):



(I)

wherein:

R_1 represents a hydroxyl group, an amino group, an alkyl group having 1 to 4 carbon atoms or an alkoxy group having 1 to 4 carbon atoms.

35. (New) The beads according to claim 34, wherein the phenolic compound is selected from hydroquinone, pyrocatechin, resorcin or m-aminophenol.

36. (New) The beads according to claim 31, having a size of between 100 μm and 3000 μm in size, optionally between 500 μm and 1500 μm.

37. (New) The beads according to claim 31, having a size, expressed as the median diameter (d_{50}), of from 300 μm to 2000 μm, optionally from 500 μm to 1500 μm.

38. (New) The beads according to claim 31, having an attrition resistance of between 90% and 100%, optionally more than 98%.

39. (New) The beads according to claim 31, having an internal porosity, determined using a mercury porosimeter, of between 0.5 and 0.75 having a bulk density (loose) of at least 0.3 and optionally between 0.4 and 0.5.

41. (New) The beads according to claim 35, having a degree of compressibility of 5% to 10%.

42 (New) The beads according to claim 35, having an attrition resistance of between 90% and 100%, optionally more than 98%.

43. (New) The beads according to claim 35, wherein having an internal porosity, determined using a mercury porosimeter, of between 0.5 and 0.75 cm^3/g.

44. (New) The beads according to claim 35, wherein having good solubility in polymers.

45. (New) A process for preparing the beads defined in claim 31, comprising the steps of:

a) preparing a hot concentrated aqueous solution of a phenolic compound, then,

b) fragmenting the solution into droplets and cooling the droplets obtained in a stream of gas so that they solidify into beads, and, then,

c) the beads obtained in step b) are recovered and dried.

46. (New) The process according to claim 45, wherein step b) consists of passing the phenolic acid solution through a nozzle to form droplets, solidifying the latter by allowing them to fall in a tower with a counter-current of a cold gas, in order to obtain the beads.

47. (New) The process according to claim 46, wherein step a) consists of preparing the aqueous solution of a phenolic compound at a concentration of at least 500 g/l, optionally at least 1000 g/l.

48. (New) The process according to claim 47, wherein the aqueous solution of step a) is at a temperature of between 80°C and 98°C, optionally between 85°C and 95°C.

49. (New) The process according to claim 46, wherein in step b), the nozzle is a single-hole nozzle or a multi-hole nozzle having between 1 and 3000 holes, optionally between 1 and 100 holes.

50. (New) The process according to claim 46, wherein in step b), the nozzle has perforations whose diameter is between 50 and 2000 μm, optionall between 200 and 600 μm.

51. (New) The process according to claim 49, wherein the nozzle is a static nozzle, preferably a nozzle which is subjected to a high frequency electrical vibration system, optionally at 100 to 10000 hertz.

52. (New) The process according to claim 45, wherein in step b), the gas is nitrogen or oxygen-depleted air whose temperature is between -30°C and 30°C, optionally between -10°C and 10°C.

53. (New) The process according to claim 46, wherein the droplet has a residence time for the nozzle outlet to its arrival of between 1 and 10 seconds, optionally between 3 and 5 seconds.

54. (New) The process according to claim 45, wherein in step c), the beads are being recovered using a fluidized bed technique.

55. (New) The process according to claim 45, wherein in step b) the beads are formed in a prilling tower and the beads of phenolic compound at the bottom of the prilling tower is:

10% to 50% by weight of water; and

50% to 90% by weight of phenolic compound.

56. (New) The process according to claim 55, wherein the phenolic compound is hydroquinone and the composition at the bottom of the prilling tower is:

25% to 50% by weight of water;

50% to 75% by weight of phenolic compound.

57. (New) The process according to claim 45, wherein in step c), the beads are subjected to a stream of air the temperature of which is in the range 20°C to 90°C, optionally in the range 60°C to 90°C.

58. (New) The process according to claim 57, wherein drying is carried out using a fluidized bed technique.

59. (New) The process according to claim 58, wherein the beads of phenolic compound after drying is as follows:

0.1% to 1% by weight of water; and

99% to 99.9% by weight of phenolic compound.

60. (New) The process according to claim 59, in which the composition of the beads of phenolic compound after drying is as follows:

0.1% to 0.6% by weight of water;

99.4% to 99.9% by weight of phenolic compound.